



Evaluation of the Safety and Tolerability of KA34 in a Phase 1, Double-Blind, Dose Escalation Trial in Patients with Knee Osteoarthritis

# **Grant Award Details**

Evaluation of the Safety and Tolerability of KA34 in a Phase 1, Double-Blind, Dose Escalation Trial in Patients with Knee Osteoarthritis

Grant Type: Clinical Trial Stage Projects

Grant Number: CLIN2-10388

**Project Objective:** 

 $\ \, \text{Evaluation of the Safety and Tolerability of KA34 in a Phase 1, Double-Blind, Dose Escalation Trial in Patients } \, \, \\$ 

with Knee Osteoarthritis

Investigator:

Name: Leonardo Sahelijo

**Institution**: California Institute for Biomedical

Research

Type: PI

**Disease Focus:** Osteoarthritis, Bone or Cartilage Disease, Arthritis

**Award Value**: \$8,447,523

Status: Active

## **Grant Application Details**

Application Title: Evaluation of the Safety and Tolerability of KA34 in a Phase 1, Double-Blind, Dose Escalation Trial

in Patients with Knee Osteoarthritis

### **Public Abstract:**

#### **Therapeutic Candidate or Device**

KA34 is an intra-articularly delivered small molecule therapeutic candidate which directs the differentiation of endogenous stem and progenitor cells

#### Indication

Osteoarthritis

### Therapeutic Mechanism

KA34 promotes the differentiation of cartilage endogenous stem cells through increased chondrogenic gene expression to generate healthy chondrocytes. KA34 will potentially limit the progression of and / or reverse the osteoarthritis disease process. KA34 may generate new cartilage matrix within the pre-existing matrix without fibrotic cartilage formation and aims to improve the clinical joint scores.

### **Unmet Medical Need**

There are no approved disease-modifying therapies available which stop the joint damage in 30 million osteoarthritis patients in the United States. This grant will support execution of a Phase 1 clinical trial to evaluate the safety of the small molecule, KA34, which stimulates cartilage repair.

## **Project Objective**

Completion of a Phase I clinical trial for KA34

### **Major Proposed Activities**

- Completion of clinical site selection, start-up activities and execution of the Phase I single and multiple ascending dose clinical study with KA34
- Data analysis and reporting on the Phase I single and multiple ascending dose clinical study with KA34 in osteoarthritis patients
- Evaluation of potential KA34 treatment-associated biomarkers to support future clinical development of KA34 in osteoarthritis

# Statement of Benefit to California:

Almost six million adults in California are affected with arthritis, with osteoarthritis being the most common manifestation of this disease. For the average patient, ~\$129,600 of direct medical costs are incurred in their lifetime and 50% need a total joint replacement, an invasive surgical procedure. KA34 was developed for delivery by a local injection to the affected joint. It aims to limit the progression of OA which may reduce medical costs and burden to the primary care givers.

**Source URL:** https://www.cirm.ca.gov/our-progress/awards/evaluation-safety-and-tolerability-ka34-phase-1-double-blind-dose-escalation